PSC ~~148~~ UNV 184	TECHNICAL ACTION REQUEST ( )	51 2. Date 31 August 1954

25X1

4. Contractor [redacted]
5. Address [redacted]

25X1

6. Sub-Contractor
7. Address
8. Equipment Transmitter RT-6A
9. Quantity Affected All after 1,000

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Yes Price (Increase-~~Decrease~~) No Delivery No Interchangeability

ACTION I

1. Request:
    - (a) Approval to accomplish changes in the transmitter tank circuit as itemized by paragraph 2 below. These changes will allow supplying an improved RT-6A regarding increased power output.
    - (b) The changes have previously been verbally discussed between [redacted] representative of the Government and [redacted]

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    - (c) An increased output for each test frequency at each load will result but the exact increase, in order to establish new "power output vs. frequency" limits for paragraph 5.3.4 of the equipment specification, will not be available until sufficient units, incorporating the changes, have been produced. It is therefore further requested that the present power output requirements, as approved by TAR #32, Action IV be allowed for the 1st 100 RT-6A produced with new changes until review of data obtained can be evaluated and results incorporated into the equipment specification.
    - (d) It is also known, and has been previously pointed out, that units with the changes will exhibit a slightly higher minimum frequency range allowing optimum peaking. Present RT-6A will peak at 4.5 mc while modified RT-6A's will peak at approximately 4.7 mc. Even though resonance at 4.5 mc is not obtained, increased output at 4.5 mc is still obtained over that previously available in the present RT-6A units.

2. The changes to be made consist of the following:
    - (a) Replace present "Final Amp Tuning" capacitor C112 with a variable air capacitor 156 uuf max - 8 uuf min. Same physical size and type as currently used for C112, except for min and max capacity. Present stock of these variable air capacitors are to be reworked by the supplier (Sickles) to remove plates (rotor and stator) so as to leave 18 Rotor and 19 Stator. The overall length from steatite end plates of the capacitor will therefore be identical to previous C112 and allow mounting and support from both ends in existing metal work of the unit.
    - (b) Delete present high frequency tank coil L104 and replace with new simplified type wound on 1/2" diameter poly form grooved to accept formvar wire. New coil will mount by single screw in hole already existing in metal work. Balance of now unused holes previously used in mounting old type coil will merely not be used. All metal work is already in stock.
    - (c) Delete present low frequency tank coil L105 and replace with new simplified type wound on 1/2" diameter poly form (same form as for new L104 above). New coil will mount by single screw in hole already existing in metal work. Balance of now unused holes previously used in mounting old type coil will merely not be used. An iron core grade G5 iron (Stackpole) will be inserted and cemented in center of coil in hole provided in coil form. Core to be .820 long x .250 diameter.

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ORIGINAL CL BY 235979
☐ DECL ☒ REVW ON 2010
EXT BYND 6 YRS BY Same
REASON 3d (3)

DOC 24 REV DATE 2/5/80 BY 37169
ORIG COMP 35 OPI 56 TYPE 30
ORIG CLASS S PAGES 2 REV CLASS C
JUST 22 NEXT REV 2010 AUTH: HR 70-2

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25X1

4. Contractor [redacted]
5. Address [redacted]
6. Sub-Contractor
7. Address

25X1

8. Equipment Transmitter RT-6A
9. Quantity Affected All after 1,000

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11. Approval will affect,

Yes Price (Increase-~~Decrease~~) No Delivery No Interchangeability

ACTION I (contd)

(d) The actual wiring change (point to point) within the RT-6A in general provides for operation with series type connection of both final tuning coils (L104 and L105) for low band coverage while in high band operation the low band coil (L105) is automatically shorted to ground by switch S102 with band selection. The increased power output resulting is due to improved L to C ratio and Q obtained with new coils and capacitor.

3. The exact increase in unit cost resulting by incorporation of these changes cannot be quoted at this time and will be negotiated as soon as possible. It can however be established now that the increase will not exceed (and probably be less than) four dollars $4.00 per unit.

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[redacted]

Project Engineer

ACTION II

Navy Endorsement:

[redacted]

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ACTION III

Approved by:

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Technical approval only [redacted]

For Contracting Officer

For Engineering
For the Government